

RARE PLANT INVENTORY GUIDELINES
U.S. Fish and Wildlife Service
Idaho Fish and Wildlife Office

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These guidelines describe protocols for conducting botanical inventories for Federally listed, proposed and candidate plants, and describe minimum standards for reporting results. The Service will use the information outlined below: 1) to assist in determining whether proposed project(s) may affect any listed, proposed, or candidate plants, and 2) to evaluate the direct, indirect, and cumulative effects associated with the project(s) under consideration.

Field inventories should be conducted in a manner that will locate listed, proposed, or candidate species (i.e., target species) that may be present. Field inventories should be conducted by qualified botanist(s) familiar with the target species. The entire project area requires a botanical inventory, except developed agricultural lands. The field investigator(s) should:

- I. Conduct inventories at the appropriate time of year when target species are present and identifiable. Inventories will include all potential habitats. Multiple site visits during a field season may be necessary to make observations during the appropriate phenological stage of all target species.
2. If available, use a regional or local reference population to obtain a visual image of the target species and associated habitat(s). If access to reference populations(s) is not available, investigators should study specimens from local herbaria.
3. List every plant species observed and compile a comprehensive list of plants for the entire project site. Vascular plants need to be identified to a taxonomic level which allows rarity to be determined. Nonvascular plants (e.g., cryptogams) can also be included if rarity and/or ecosystem function is a concern.
4. A report that contains the results of botanical field inventories should be submitted to the Idaho Fish and Wildlife Office (IFWO). This report should include:
 - a. a description of the biological setting, including plant community, topography, soils, potential habitat of target species, and an evaluation of environmental conditions, such as timing or quantity of rainfall, which may influence the performance and expression of target species
 - b. a map of the project location with a legal description of the site (showing scale, orientation, project boundaries, parcel size, and quadrangle name)
 - c. survey dates and survey methodology(ies)
 - d. maps showing the specific route(s) traveled through the survey area
 - e. if a reference population is available, provide a written narrative describing the target species reference population(s) used, and date(s) when observations were made
 - f. a comprehensive list of all vascular plants occurring on the project site for each habitat type
 - g. current and historic land uses of the habitat(s) and degree of site alteration
 - h. presence of target species off-site on adjacent parcels, if known
 - i. an assessment of the biological significance or ecological quality of the project site in a local and regional context

- j. names and qualifications of all surveyors
5. If target species is (are) found, the following information should also be included in the report:
 - a. a map showing Federally listed, proposed and candidate species distribution as they relate to the proposed project.
 - b. if target species are associated with wetlands, a description of the direction and integrity of flow of surface hydrology. If target species are affected by adjacent off-site hydrological influences, describe these factors.
 - c. the target species phenology and microhabitat, an estimate of the number of individuals of each target species per unit area; identify areas of high, medium and low density of target species over the project site, and provide acres of occupied habitat of target species. Investigators could provide color slides or photos of target species or representative habitats to support information or descriptions contained in reports.
 - d. the degree of impact(s), if any, of the proposed project as it relates to the occupied (or potential unoccupied) habitat of target species.
 6. Document findings of target species by completing a Rare Plant Observation Report and submitting copies to the Idaho Conservation Data Center or Oregon Natural Heritage Program, as appropriate. Documentation of determinations and/or voucher specimens may be useful in cases of taxonomic ambiguities, habitat or range extensions.
 7. Report as an addendum to the original survey, any change in abundance and distribution of target plants in subsequent years. Project sites with inventories older than 1 year from the current date will likely need additional surveys. Investigators should consult with the Service to assess whether additional surveys are needed.
 8. Adverse or unforeseen conditions may prevent investigator(s) from determining the presence of and/or identifying target species. Disease, drought, predation, or herbivory may influence the presence or identification of target species in any year. In some cases, additional botanical inventories in subsequent years may be required. Investigator(s) should discuss such conditions, if applicable, for specific target species and/or project sites.
 9. For listed plant species, consult the IFWO's Section 7 guidelines for additional species specific information on phenology, threats, potential habitat, etc.